

### ABSTRACT

The present invention is directed to a method and system for producing and storing "roaming" area information of a mobile terminal in a home location register or guest location register. A "roaming" area includes a group of location areas within a single service area. When a mobile terminal enters a new location area within a new roaming area or enters a new service area, the home location register (HLR) or guest location register (GLR) is updated with the roaming area information of the mobile terminal. The HLR/GLR stores this information in addition to the other information typically stored for the mobile terminal. If an MSC/VLR system restart and reload occurs or another event such that the location area information is lost, the roaming area information can be retrieved from the HLR/GLR. Likewise, if the mobile terminal does not respond to a page within the location area stored for the mobile terminal, the roaming area information can be retrieved from the MSC/VLR. Thereafter, the roaming area information can be used by the MSC/VLR to perform a primary page for a mobile terminal within the roaming area, instead of a global page within the service area, thus reducing paging congestion in the network.